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# Closure, credence and rationality: a problem for non-belief hinge epistemology

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## Abstract

Duncan Pritchard's Epistemic Angst promises a novel solution to the closure-based sceptical problem that, unlike more traditional solutions, does not entail revising our fundamental epistemological commitments. In order to do this, it appeals to a Wittgensteinian account of rational evaluation, the overarching theme of which is that it neither makes sense to doubt nor to believe in our anti-sceptical hinge commitments. The purpose of this paper is to show that the argument for the claim that there can be no rational basis to believe our anti-sceptical hinge commitments relies upon an implicit assumption about rational support that I label The Pritchardian Rational Grounds Principle. I argue that, insofar as this principle is intended to apply to closure-style inferences, it leads to irrational doxastic attitudes. I consider a seemingly plausible modification of the principle that would avoid this result but show that this modified principle faces serious problems of its own.

**Keywords** Wittgenstein · Hinge · Closure · Scepticism · Mooreanism · Certainty

## 1 Introduction

Duncan Pritchard's response to closure-based scepticism draws inspiration from Wittgenstein's remarks on scepticism, the central notion of which is that of a hinge commitment or hinge proposition. Wittgenstein believed that certain kinds of propositions, about which one is optimally certain, play a special kind of role that sets them apart from the ordinary channels of inquiry. Just as a door cannot turn without

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its hinges staying put, so inquiry cannot proceed without certain commitments standing fixed. A variety of competing accounts of hinge epistemology exist in the literature, distinguished from each other by their responses to several issues such as whether hinges are propositional, knowable, dubitable, empirical, fact-stating, justifiable and rational.<sup>1</sup> Pritchard labels his view a *non-belief* account of hinges, a key feature of which is the surprising claim that hinges are commitments that we cannot believe despite our being certain of them (2016a, pp. 90–94; 2016b, pp. 78–82). The purpose of this paper is to examine Pritchard’s argument for this claim, to shed light on a critical assumption at work in the argument and to demonstrate that the assumption is flawed. In Sect. 2 I outline Pritchard’s response to closure-based scepticism and the non-belief reading of hinges which underpins it. In Sect. 3 I show that Pritchard’s argument for the non-belief reading relies upon the assumption of a principle about the nature of rational support which, depending on how it is unpacked, either leads to irrational doxastic attitudes or is inapplicable to closure-style inferences. In Sect. 4 I consider whether a modified version of Pritchard’s account might avoid this problem but conclude that ultimately it cannot.

## 2 Pritchard on closure-based scepticism and non-belief hinge epistemology

Pritchard frames the closure-based sceptical problem as a paradox rather than an argument with a radical sceptical conclusion. He formulates the closure principle in the following way:

### *The Closure Principle*

If S has rationally grounded knowledge that p, and S competently deduces from p that q, thereby forming a belief that q on this basis while retaining her rationally grounded knowledge that p, then S has rationally grounded knowledge that q (2016b, p. 71).

Thus formulated, the principle looks eminently plausible. The paradox arises by combining the closure principle with two further claims:

### *The Closure-Based Sceptical Paradox*

- (I) One cannot have rationally grounded knowledge of the denials of radical sceptical hypotheses
- (II) The closure principle
- (III) One has a large body of rationally grounded knowledge of the external world

In presenting the problem of closure-based scepticism as a paradox rather than an argument, Pritchard is able to demonstrate that the problem is not a dialectical stand-off with an imagined sceptical opponent, but rather “a deep tension within our own

<sup>1</sup> For a recent taxonomy of different hinge epistemologies and their positions on each of these issues see Coliva (2016).

folk epistemological concepts” (2016a, p. 15). We feel inclined to grant that knowledge of the denials of radical sceptical hypotheses is not possible. But we also feel inclined to grant that ordinary, everyday knowledge is possible. And yet, the closure principle seems to entail that these two claims cannot simultaneously be true. Traditional responses to the paradox thus come in three varieties, equivalent to the rejection of one of each of the three claims in the paradox. Rejecting (III) is tantamount to embracing radical scepticism. Rejecting (II) means giving up an extremely plausible epistemological principle.<sup>2</sup> And rejecting (I) would mean embracing a form of Mooreanism, which many epistemologists—Pritchard included—find to be intellectually unsatisfying. Pritchard points out that, to the extent that we find each of these three claims highly intuitive, any strategy that seeks to respond to the paradox by overturning one of them would be revisionist (2016b, p. 72).

Pritchard argues there is a fourth way out of the paradox that avoids such revisionism and that, for this reason, is to be preferred from its alternatives. Instead of revising our epistemological theory by overturning one of the three horns of the trilemma, Pritchard argues that, despite appearances, these claims are not in fact inconsistent. This is because, as we will see, Pritchard thinks that the closure principle is inapplicable to the denials of radical sceptical hypotheses, and thus it is a mistake to think that (III) and (II) jointly entail the denial of (I)—or likewise that (I) and (II) entail the denial of (III). In order to show how this surprising claim could be true, he appeals to some remarks from Wittgenstein’s notes on scepticism.<sup>3</sup> The key thought behind this approach is that our anti-sceptical commitments are not in the market for rational evaluation in the way that both sceptic and Moorean strategies assume. The sceptical strategy assumes that our anti-sceptical commitments are open to rational doubt, while the Moorean response assumes the possibility of a rational basis for belief in our anti-sceptical commitments.<sup>4</sup> Pritchard insists, however, that our anti-sceptical commitments belong to a special class that, following Wittgenstein, he calls “hinge commitments” (2016a, pp. 66–73; 2016b, p. 79). Hinge commitments are arational standing certainties that are not the object of investigation—whether a priori or a posteriori—but are rather part of the presupposed background, or “framework”, relative to which rational evaluation takes place (2016b, p. 78). Pritchard claims that because our hinge commitments are neither the result of a rational process nor subject to rational considerations, both the sceptical and anti-sceptical strategies for dealing with the paradox are misguided (2016a, pp. 65–66; 2016b, p. 78).

<sup>2</sup> A majority of epistemologists find this option unsatisfying. For a defence of closure see Hawthorne (2005). For an argument against closure see Dretske (2005).

<sup>3</sup> The notes referred to here are those posthumously published as *On Certainty* (1969).

<sup>4</sup> Pritchard includes among ‘Moorean’ anti-sceptical strategies the kind of ‘entitlement’ view defended by Wright (2004, 2014). This is a somewhat unusual way to categorise the views on offer given that Wright explicitly positions his view against Mooreanism. Furthermore, Wright is clear that he does not think there can be a rational basis to *believe* in anti-sceptical hinge propositions such as *there is an external world* (according to Wright, we are warranted to *trust*, rather than *believe*, in such). However, the point that Pritchard seems to want to make here is that, like the standard Moorean anti-sceptical strategy, Wright’s entitlement strategy does take there to be a rational basis for our anti-sceptical hinge commitments. In contrast, the view that Pritchard endorses denies that there can be a rational basis for our hinge commitments.

In sum, we can endorse the closure principle unreservedly and yet not be forced to reject either (I) or (III) once we come to appreciate the kinds of limits to rational evaluation that Wittgenstein uncovers in his remarks on scepticism.

The proposal that Pritchard puts forward holds that hinge commitments are, at one and the same time, neither in the market for rational doubt nor for rational belief (2016a, pp. 63–66; 2016b, pp. 78–84). In what follows I will be focusing in on the latter of these two claims regarding the impossibility of a rational basis for belief. Hinge commitments are commitments to those propositions about which we are *optimally certain* (Pritchard 2016b, p. 78). This includes propositions such as ‘I have two hands’ as well as ‘there is an external world’. Given their optimal certainty, hinge commitments “cannot be subject to rational doubt” (*ibid.*). This is because doubt about that which is optimally certain would throw into question “one’s entire system of beliefs, and thus the very putative rational basis of the doubt itself” (2016b, p. 79). Ordinarily, one might think that this means these propositions enjoy a uniquely solid epistemic basis. Not so, says Pritchard: “it does not follow that these hinge commitments have a special rational grounding, but rather just as they cannot be rationally doubted, so they cannot be coherently thought of as rationally grounded either” (*ibid.*). Propositions about which one is optimally certain cannot, according to Pritchard, have a rational basis because “to conceive of [a] proposition as rationally grounded is to suppose that the rational grounds are *more certain* than the proposition itself” (2016a, p. 65; emphasis added). Since nothing can be more certain than that which is optimally certain, our optimally certain hinge commitments cannot be rationally grounded. This is to say that “one cannot make sense of a rational basis for *belief*” in hinges (2016b, p. 79; emphasis added). For this reason, Pritchard calls his view the non-belief reading of hinge commitments (2016a, p. 91).<sup>5</sup> And since hinges cannot be believed, neither can they be known. Thus, while the indubitability aspect of the view separates it from sceptical responses to the paradox, the non-belief aspect separates it from ‘Moorean’ responses.

One might think that the upshot of the above is that Pritchard is forced to deny closure. After all, if our hinge commitments aren’t in the market for rationally grounded knowledge, then it looks like it ought to be very easy to generate counterexamples to closure. In fact, Pritchard maintains that his view can embrace the closure principle unreservedly. He argues that what the view really entails is that “the closure principle is simply inapplicable to our hinge commitments” (2016b, p. 81). The reason being that the closure principle applies only to cases where a belief is formed via deductive inference, whereas according to the non-belief reading this is “simply impossible” (2016a, p. 86). The closure principle thus cannot be used to motivate scepticism, nor can it be used to defend Mooreanism.

<sup>5</sup> In contrast to what he calls the externalist, entitlement, and non-propositional readings (2016a, pp. 73–88).

### 3 Against Pritchensteinian rational grounding

Notice that Pritchard's argument depends upon the assumption that a proposition is rationally grounded only if the rational grounds are "more certain" than the proposition itself (2016a, p. 65). The claim that hinge commitments cannot have a rational grounding—and thus cannot be thought of as *beliefs*—fully depends upon this assumption. Without it, it is unclear why the mere fact of the optimal certainty of hinges would preclude them from counting as rationally grounded; more traditional approaches would hold that a proposition about which one is optimally certain ought to possess an extremely solid rational basis. The argument for the irrationality of hinges thus depends on assumption of the following principle:

*The Pritchensteinian Rational Grounds Principle*

A proposition *p* is rationally grounded only if the rational grounds are more certain than the proposition itself<sup>6</sup>

For this principle to do the work that Pritchard needs it to do, it ought to apply specifically to cases where the rational grounds are themselves other propositions. Given that we are interested specifically in closure, and thus in whether a *proposition* can provide rational grounds on which to believe another proposition (as opposed to, say, an experience, i.e. a perceptual experience, providing grounds to believe a proposition), it is necessary that the rational ground(s) in question is a proposition(s). We can thus modify the Pritchensteinian Rational Grounds Principle in the following way:

(PG1) One proposition *p* can count as a reason for believing another proposition *q* only if *p* is more certain than *q*

This assumption appears crucial to Pritchard's argument that the closure principle is inapplicable to our anti-sceptical hinge commitments. Without it, we have no reason to suppose that one cannot acquire a rationally grounded belief in a hinge by performing a competent deduction from a rationally grounded belief. There are some very serious problems that this principle faces which we shall see shortly, but first I want to note some substantive commitments implicit to PG1.

PG1 presupposes a gradable notion of 'certainty'. There is a strict sense in which 'certainty' is sometimes used as an all-or-nothing notion, meaning something like credence 1. But there is another sense in which 'certainty' is used in a gradable manner, as when we say things like 'fairly certain' or 'absolutely certain'. Clearly, Pritchard is using 'certainty' in the latter sense when he speaks of propositions being 'more', 'less' or 'optimally' certain (2016a, pp. 64–65). Thus PG1, which

<sup>6</sup> The principle stated here is a paraphrase of the following quote: "to conceive of [a] proposition as rationally grounded is to suppose that the rational grounds are *more certain* than the proposition itself" (2016a, p. 65; emphasis added). Pritchard again appeals to the same assumption further down on the same page when he says that "If one doubts that one has two hands, then one ought not to believe what one's eyesight tells one, since this is *no more certain* than that one has two hands, which is in doubt" (*ibid.*; emphasis added).

we have extracted from Pritchard's argument, uses a gradable notion of certainty. In addition to this, PG1 also entails that a proposition *p* can be a reason for believing another proposition only if *p* is certain (*p* cannot be *more certain* than *q* without being certain). This is a substantive claim, given that many epistemologists will grant that that belief does not require certainty<sup>7</sup> and that if it is rational to believe *p* then it is rational to believe (at least some of) *p*'s consequences. PG1 is forced to deny this liberal conception of belief according to which it can be rational to believe things about which one is less than certain. On the other hand, some epistemologists maintain that belief entails certainty, and thus on such a view PG1 is perfectly acceptable.<sup>8</sup> I note this merely to flag PG1's substantive commitment to a strong conception of belief that entails certainty.

One final clarificatory point. Degrees of belief are commonly measured in terms of credences or degrees of confidence. Pritchard, on the other hand, seems to measure rational belief in terms of degrees of *certainty*.<sup>9</sup> In what follows, I will be assuming that degrees of confidence and degrees of certainty map onto each other in a fairly straightforward way. I will assume that both are a measure of credences such that to become more and more confident of a proposition is to become closer and closer to certainty. I will not argue for this assumption but will note the following point. The only other alternative is to radically disconnect the notions of degrees of confidence and degrees of certainty in such a way that what Pritchard means by a belief being grounded in a particular degree of certainty is not to be understood in terms of a high degree of confidence or particular credence. I do not think this alternative has much going for it, but I will flag it as a possible avenue for avoiding the dilemma below which assumes a close connection between degrees of certainty and degrees of confidence.

We are now in a position to explore the dilemma for Pritchard's account. As it stands, PG1 can be read in at least two different ways. On one of these readings, it is completely implausible, yet on the other reading it is simply inapplicable to closure-style inferences. To see what I mean by this, notice that we may distinguish between two ways in which one proposition can provide a rational basis for another proposition, relating to the kind of support relation between the two. Say that one proposition can provide a *deductive* rational basis for another so long as the former deductively entails the latter. Likewise, say that one proposition can provide a *non-deductive* rational basis for another so long as the former non-deductively—i.e. inductively or abductively—supports the latter. PG1 can thus be interpreted in two ways, relating to these two types of support relation.

We can rule out the non-deductive reading of PG1 very quickly. Closure-style inferences by definition involve deductive inferences—e.g. *here is a hand, therefore*

<sup>7</sup> See, for example, Foley (1992).

<sup>8</sup> See, for example, Dodd (2016).

<sup>9</sup> Recall the Pritchardian Rational Grounds Principle and the quoted passages in support of Pritchard's endorsement of it.

*the external world exists.*<sup>10</sup> Thus, on assumption that PG1 is a principle about strictly non-deductive inferences, it is inapplicable to the issue of whether (deductive) closure-style inferences can serve to provide a rational basis on which to believe our anti-sceptical hinge commitments.

This leaves only the option of a deductive reading of PG1. However, if we take a deductive reading of the rational support relation, PG1 is completely implausible. It clashes with a basic principle of rationality. It demands of us that we are more certain of the antecedent of a conditional than of its consequent. Such a doxastic state would be highly irrational. To see why, first consider the following consequence of the probability axioms:

$$\text{If } p \rightarrow q \text{ then } P(p) \leq P(q)$$

This says that where  $p$  entails  $q$ , the probability of  $p$  cannot be higher than that of  $q$ . This is a principle about objective probability. However, notice that, on assumption that a rational agent's credences will satisfy the laws of probability,<sup>11</sup> we can derive the following related principle:

(RC) where  $p$  deductively entails  $q$ , it is irrational to be more certain of  $p$  than of  $q$

This principle is eminently plausible. A simple example may help to show why. The proposition *this is a red ball* deductively entails that *this is a ball*. RC says that it would be irrational to be more certain that *this is a red ball* than that *this is a ball*. And that seems clearly right. By carrying out a deductive inference, one is guaranteed not to introduce any new error possibilities. This is why, as Richard Pettigrew frames the same point, a rational agent's credences should not 'drop' across an entailment.<sup>12</sup>

PG1, when read with a deductive reading of the rational support relation, is incompatible with RC. If credences must not drop across deductive entailment, then it cannot be a requirement of rational support that they do so. So, to the extent that RC seems fundamental to our conception of rationality, the deductive reading of PG1 is a non-starter.

A possible objection to this line of reasoning is the following. RC is a principle about rationality, but our hinge commitments are arational and thus aren't governed by the ordinary rules of rationality. This objection is question begging. The claim that hinges are arational follows only if there can be no rational basis to believe a hinge. In considering whether it is correct that there can be no such basis, one cannot appeal to the arationality of hinges, since that is precisely what is being called into question.

<sup>10</sup> This infamous example goes back to G. E. Moore's "Proof of an External World", in which Moore is very clear that the relevant inferences need to be deductive (2000, pp. 26–27).

<sup>11</sup> This assumption is known as probabilism. For a discussion of *probabilism* and related principles, see Pettigrew (2016).

<sup>12</sup> Pettigrew calls this principle No Drop and formalises it in the following way: If an agent has opinion set  $\{A, B\}$  and  $A$  entails  $B$ , then rationality requires that  $c(A) \leq c(B)$  (2016, p. 2).



Another possible objection to the above argument is that it presupposes the truth of *probabilism*—the view that our credences ought to satisfy the axioms of probability. Probabilism is a contentious view in epistemology and for anyone who is unpersuaded by its truth, the forgoing may seem relatively unpersuasive.<sup>13</sup> I do not think that the argument ultimately rests on an assumption of probabilism but before getting to that, I first want to draw the reader's attention to the following. One reason for objecting to understanding our epistemic practices in terms of the probability axioms is that this mischaracterises the subject matter of epistemology as an inquiry into the nature of perfectly rational agents, whereas human beings are inherently imperfectly rational. This objection maintains that probabilism is in some sense too demanding—requiring doxastic attitudes that are fine grained, whereas our doxastic states are coarse-grained. One thing that I think is worth bearing in mind is that Pritchard and Wittgenstein seem to have a very specific notion of rationality in mind—one that I am not convinced this objection will apply to. This is to say that the Pritchensteinian account of rationality is explicitly not an account of the limits of rationality qua *human* rationality. The limits to rationality that Pritchard and Wittgenstein are trying to convince us of are “not because of some incidental lack on our part, but rather [reflect] the very nature of what is involved in rational evaluation” (2016a, p. 4). Wittgenstein's point, Pritchard assures us, is a matter of the “logic” of rationality (*ibid.*). And I suspect that whether or not it makes sense to understand our actual epistemic practices in terms of something like the probability axioms, it perhaps still makes sense to understand an idealised form of rational evaluation this way.

A more robust response to this objection is that even if we disregard probabilism altogether, the essential problem remains that it is still inherently irrational to be more confident of the antecedent of a conditional than of its consequent.<sup>14</sup> Earlier on I argued for RC by appealing to the probability axioms together with the assumption that a rational agent's credences will satisfy those axioms. But suppose we reject this assumption and maintain that credences are essentially non-probabilistic. It will not follow from this that rationality now permits higher degrees of certainty in the antecedents of conditionals than their consequents. I am not sure how best to argue for this but consider the following line of thought. To be more certain of  $p$  than of  $q$  is to believe that one possible state of affairs is  $p$  and  $\sim q$ . At the same time, to believe that  $p$  deductively entails  $q$  is to believe that it is not possible that  $p$  and  $\sim q$ —this ought to follow given any standard definition of deductive entailment. Therefore, to be more certain of a proposition  $p$  than of something one believes to be a deductive consequence of  $p$ , is to believe a contradiction, namely: it is possible that  $[p \wedge \sim q]$  and it is not possible that  $[p \wedge \sim q]$ . On assumption that it is irrational to believe something one knows to be a contradiction, we thus have another way of showing why it is irrational to be more confident of the antecedent of a conditional of than of its

<sup>13</sup> For a critical discussion of the main arguments in defence of probabilism see Hajek (2008).

<sup>14</sup> Again, to avoid confusion, this assumes that one grasps the conditional. There need be nothing irrational in being more confident of the antecedent of a conditional than its consequent where one has yet to grasp the entailment.

consequent. The appeal to probabilism was one very precise way to illuminate this irrationality, but there are other ways to do this that do not depend on probabilism.

#### 4 An alternative Pritchsteinian principle?

We have seen that the thesis that a proposition can be rationally grounded only if one is more certain of its grounds leads to irrationality. This means that if there is indeed something about the optimal certainty of hinges that precludes their counting as rationally grounded there needs to be some other explanation for why this is.

Consider the following example that Wittgenstein and Pritchard discuss in relation to the claim that optimal certainty of a hinge precludes its counting as evidentially grounded:

If a blind man were to ask me “Have you got two hands?” I should not make sure by looking. If I were to have any doubt of it, then I don’t know why I should trust my eyes. For why shouldn’t I test my *eyes* by looking to find out whether I see my two hands? *What* is to be tested by *what*? (OC, Sect. 125).

In discussing this case, Pritchard again assumes that something akin to PG1 is in play: “If one doubts that one has two hands, then one ought not to believe what one’s eyesight tells one, since this is *no more certain* than that one has two hands, which is in doubt” (2016a, p. 65; emphasis added). But we’ve already seen why PG1 can’t in general be an explanation for why hinge commitments are groundless. So perhaps there is a different way to capture what Wittgenstein is gesturing at with this example that doesn’t assume PG1. After all, nothing in the example seems to *necessitate* Pritchard’s point that what is going on is a failure of the basis to be *more certain* than the hinge proposition (though the passage permits this reading). An alternative explanation could be the following. Since hinges are already optimally certain, there is nothing that one could appeal to that would warrant an increase of certainty in one’s hinges. If I am already maximally certain that I have two hands, of course it would be absurd to check by looking to see whether I do since there is no possible outcome of this investigation that would increase my certainty in my belief that I have two hands. We thus have a possible alternative to PG1:

(PG2) One proposition *p* can count as a rational basis for believing another proposition *q* only if *p* warrants an increase of confidence in *q*<sup>15</sup>

To be clear, neither Wittgenstein nor Pritchard explicitly endorse PG2. The claim here is not an exegetical one. Rather, since PG1—which Pritchard does seem to endorse—fails to stand up to scrutiny, perhaps there is an alternative understanding of why it is the case that something’s being optimally certain precludes it from counting as rationally grounded. PG2 looks like a potential alternative to PG1 that

<sup>15</sup> I switch here to talking of degrees of confidence rather than degrees of certainty.

shows some promise of capturing why this might be. There are, however, good reasons to be suspicious of PG2 also.

Sometimes, our reasons for belief overdetermine the beliefs they support. And yet, they are reasons for belief nonetheless. It can easily be the case that I acquire a reason for believing a proposition without there being an increase in the degree of confidence I am warranted in taking towards that proposition. This is the case when I already possess stronger reasons for belief prior to acquiring the additional reasons. Consider the following case. Suppose a legal setting in which it is being determined whether a defendant, Smith, committed a crime at a given place and time. An expert gives testimony to the effect that Smith's DNA matches that of the DNA found at the scene of the crime. Clearly, this is a reason for believing that the defendant was at the scene of the crime at some point. Even for Smith himself, who already knows that he was at the scene of the crime, the fact that his DNA has been found at the scene of the crime is still a reason for believing that he was there. And yet, this is not to say that it is a reason that ought to increase his confidence that he was there, since he already has a much stronger basis on which to believe that. This is in conflict with PG2, which entails that unless the discovery that his DNA was found at the scene of the crime increases Smith's warranted degree of confidence in his belief that he was at the scene of the crime, it is not a reason—a rational basis—for that belief. All the worse for PG2.

## 5 Conclusion

We have seen that Pritchard's solution to the closure-based sceptical paradox is to adopt what he calls a Wittgensteinian account of the structure of rational evaluation. I have focused on one rather radical aspect of this view: that optimal certainty of our anti-sceptical hinge commitments precludes a rational basis for belief in them. Pritchard's argument seems to presuppose that it is a condition on one proposition counting as a basis for belief in another proposition that the former is more certain than the latter. I have argued that insofar as this principle is intended to be a principle that applies to deductive entailments between propositions—and it better be if it is to apply to closure cases—it is incompatible with some very basic principles of rationality. In light of this, I have tried to sketch an alternative understanding of why it could be that optimal certainty precludes the possibility of a rational basis for belief but found that this alternative proposal faces fatal problems of its own.

Where does all of this leave us? It is starting to look like there is no hope for the view that there can be no rational basis for belief in a proposition simply by virtue of the fact that one is optimally certain of it. This of course removes the force of the argument that the closure principle is inapplicable to our anti-sceptical hinge commitments, since that relied on the impossibility of forming a rationally grounded belief in hinges. The question now is whether there is anything else that can be said about hinges—as propositions that are indubitable though perhaps not unbelievable—that would present us with a strategy for solving the closure-based sceptical paradox. To attempt an answer to this question here, would however, to go beyond the scope of this paper.

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